



0590  
0614

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/032,281  
Source: OIPF  
Date Processed by STIC: 6-14-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
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<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Does Not Comply  
Corrected Diskette Needed



OIFE

## RAW SEQUENCE LISTING

DATE: 06/14/2002

PATENT APPLICATION: US/10/032,281

TIME: 10:22:43

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

```

4 <110> APPLICANT: Wyrick, John
5     Young, Richard A.
6     Ren, Bing
7     Robert, Francois
8     Simon, Itamar
10 <120> TITLE OF INVENTION: Genome-Wide Location and Function of DNA
11     Binding Proteins
13 <130> FILE REFERENCE: 0399.1212-005
15 <140> CURRENT APPLICATION NUMBER: 10/032,281
16 <141> CURRENT FILING DATE: 2001-12-21
18 <150> PRIOR APPLICATION NUMBER: 09/654,409
19 <151> PRIOR FILING DATE: 2000-09-01
21 <150> PRIOR APPLICATION NUMBER: PCT/US00/24358
22 <151> PRIOR FILING DATE: 2000-09-01
24 <150> PRIOR APPLICATION NUMBER: 60/151,972
25 <151> PRIOR FILING DATE: 1999-09-01
27 <150> PRIOR APPLICATION NUMBER: 60/257,455
28 <151> PRIOR FILING DATE: 2000-12-21
30 <150> PRIOR APPLICATION NUMBER: 60/323,620
31 <151> PRIOR FILING DATE: 2001-09-20
33 <160> NUMBER OF SEQ ID NOS: 32
35 <170> SOFTWARE: FastSEQ for Windows Version 4.0
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 12
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: Mbp 1 consensus binding motifs
W--> 45 <221> NAME/KEY: misc_feature
46 <222> LOCATION: 2, 4, 12
47 <223> OTHER INFORMATION: n = A,T,C or G
W--> 49 <400> 1
W--> 50 wnnrncgcg hn
52 <210> SEQ ID NO: 2
53 <211> LENGTH: 12
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Swi4 consensus binding motifs
W--> 60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: 1, 2, 3, 4
62 <223> OTHER INFORMATION: n = A,T,C or G
W--> 64 <400> 2

```

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## RAW SEQUENCE LISTING

DATE: 06/14/2002

PATENT APPLICATION: US/10/032,281

TIME: 10:22:43

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

W--> 65 nnnncrcsaa aw 12

67 &lt;210&gt; SEQ ID NO: 3

68 &lt;211&gt; LENGTH: 24

69 &lt;212&gt; TYPE: DNA

70 &lt;213&gt; ORGANISM: Artificial Sequence

72 &lt;220&gt; FEATURE:

73 &lt;223&gt; OTHER INFORMATION: Mcm1/Fkh2 consensus binding motifs

W--> 75 <221> NAME/KEY: misc\_feature

76 &lt;222&gt; LOCATION: 1, 2, 3, 4, 11, 12, 13, 21, 27

77 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

W--> 79 <400> 3

W--> 80 nnnnyy[nnnn] nngsnaawwn ryma 24

82 &lt;210&gt; SEQ ID NO: 4

83 &lt;211&gt; LENGTH: 16

84 &lt;212&gt; TYPE: DNA

85 &lt;213&gt; ORGANISM: Artificial Sequence

87 &lt;220&gt; FEATURE:

88 &lt;223&gt; OTHER INFORMATION: Mcm1 consensus binding motifs

W--> 90 <221> NAME/KEY: misc\_feature

91 &lt;222&gt; LOCATION: 7, 11

92 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

W--> 94 <400> 4

W--> 95 wwtwccnraw nrrgwa 16

97 &lt;210&gt; SEQ ID NO: 5

98 &lt;211&gt; LENGTH: 9

99 &lt;212&gt; TYPE: DNA

100 &lt;213&gt; ORGANISM: Artificial Sequence

102 &lt;220&gt; FEATURE:

103 &lt;223&gt; OTHER INFORMATION: Ace2 consensus binding motifs

W--> 105 <221> NAME/KEY: misc\_feature

106 &lt;222&gt; LOCATION: (1)...(9)

107 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

W--> 109 <400> 5

W--> 110 rancmmgca 9

112 &lt;210&gt; SEQ ID NO: 6

113 &lt;211&gt; LENGTH: 16

114 &lt;212&gt; TYPE: DNA

115 &lt;213&gt; ORGANISM: Artificial Sequence

117 &lt;220&gt; FEATURE:

118 &lt;223&gt; OTHER INFORMATION: Ace2 consensus binding motifs

W--> 120 <221> NAME/KEY: misc\_feature

121 &lt;222&gt; LOCATION: 6, 7, 8, 11, 14, 16

122 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

W--> 124 <400> 6

W--> 125 agggannnwkw nwrnkn 16

127 &lt;210&gt; SEQ ID NO: 7

128 &lt;211&gt; LENGTH: 14

129 &lt;212&gt; TYPE: DNA

130 &lt;213&gt; ORGANISM: Artificial Sequence

not n's

Sequence is only 24 bases Long.

all n's must be included

## RAW SEQUENCE LISTING

DATE: 06/14/2002

PATENT APPLICATION: US/10/032,281

TIME: 10:22:43

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

```

132 <220> FEATURE:
133 <223> OTHER INFORMATION: Swi5 consensus binding motifs
W--> 135 <221> NAME/KEY: misc_feature
136 <222> LOCATION: 2, 3, 4, 7, 8
137 <223> OTHER INFORMATION: n = A,T,C or G
W--> 139 <400> 7
W--> 140 gnnngggnsc agma 14
142 <210> SEQ ID NO: 8
143 <211> LENGTH: 13
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Swi5 consensus binding motifs
W--> 150 <221> NAME/KEY: misc_feature
151 <222> LOCATION: 2, 3, 8, 12
152 <223> OTHER INFORMATION: n = A,T,C or G
W--> 154 <400> 8
W--> 155 gnnatgrntg gnk 13
157 <210> SEQ ID NO: 9
158 <211> LENGTH: 8
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Fkh1/Fkh2 consensus binding motifs
165 <400> SEQUENCE: 9
166 rtaaacaa 8
168 <210> SEQ ID NO: 10
169 <211> LENGTH: 19
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Fkh1 consensus binding motifs
W--> 176 <221> NAME/KEY: misc_feature
177 <222> LOCATION: 2, 3, 5, 7, 8, 9, 10, 12, 13, 14
178 <223> OTHER INFORMATION: n = A,T,C or G
W--> 180 <400> 10
W--> 181 rngsnsgsnnn gnnnsyssy 19
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 12
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Fkh1 consensus binding motifs
W--> 191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: 5, 9, 11
193 <223> OTHER INFORMATION: n = A,T,C or G
W--> 195 <400> 11
W--> 196 ttykngagaa nt 12
198 <210> SEQ ID NO: 12

```

these are not n's .

not 'n'

## RAW SEQUENCE LISTING

DATE: 06/14/2002

PATENT APPLICATION: US/10/032,281

TIME: 10:22:43

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

199 <211> LENGTH: 13  
 200 <212> TYPE: DNA  
 201 <213> ORGANISM: Artificial Sequence  
 203 <220> FEATURE:  
 204 <223> OTHER INFORMATION: Fkhl consensus binding motifs  
 W--> 206 <221> NAME/KEY: misc\_feature  
 207 <222> LOCATION: 3, 4, 12, 13  
 208 <223> OTHER INFORMATION: n = A,T,C or G  
 W--> 210 <400> 12  
 W--> 211 kkcnsrssmk ssk 13  
 213 <210> SEQ ID NO: 13  
 214 <211> LENGTH: 67  
 215 <212> TYPE: DNA  
 216 <213> ORGANISM: Artificial Sequence  
 218 <220> FEATURE:  
 219 <223> OTHER INFORMATION: Z1372 MBP1 18 myc forward primer  
 221 <400> SEQUENCE: 13  
 222 ataagggcgc agaacagatc atcacatct caaacgcgaa tagtcatgca tccggttctg 60  
 223 ctgctag 67  
 225 <210> SEQ ID NO: 14  
 226 <211> LENGTH: 67  
 227 <212> TYPE: DNA  
 228 <213> ORGANISM: Artificial Sequence  
 230 <220> FEATURE:  
 231 <223> OTHER INFORMATION: Z1372MBP1 18 myc backward primer  
 233 <400> SEQUENCE: 14  
 234 ctatttttca gtatatggat acatgtaaag ttcctctatt tatgtatatt cctcgaggcc 60  
 235 agaagac 67  
 237 <210> SEQ ID NO: 15  
 238 <211> LENGTH: 67  
 239 <212> TYPE: DNA  
 240 <213> ORGANISM: Artificial Sequence  
 242 <220> FEATURE:  
 243 <223> OTHER INFORMATION: Z1335 SWI4 18 myc forward primer  
 245 <400> SEQUENCE: 15  
 246 acattgactc aaaattggac gatatagaaa aggatttgag ggcaaacgca tccggttctg 60  
 247 ctgctag 67  
 249 <210> SEQ ID NO: 16  
 250 <211> LENGTH: 67  
 251 <212> TYPE: DNA  
 252 <213> ORGANISM: Artificial Sequence  
 254 <220> FEATURE:  
 255 <223> OTHER INFORMATION: Z1335 SWI4 18 myc backward primer  
 257 <400> SEQUENCE: 16  
 258 aaaaactctg ataatatagt aaaaattatt ggtacattgt gaattaaaat cctcgaggcc 60  
 259 agaagac 67  
 261 <210> SEQ ID NO: 17  
 262 <211> LENGTH: 67  
 263 <212> TYPE: DNA

*these are not n's*

## RAW SEQUENCE LISTING

DATE: 06/14/2002

PATENT APPLICATION: US/10/032,281

TIME: 10:22:43

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

264 <213> ORGANISM: Artificial Sequence  
266 <220> FEATURE:  
267 <223> OTHER INFORMATION: Z1373 SWI6 18 myc forward primer  
269 <400> SEQUENCE: 17  
270 aagacattga cactgacgaa atgcaagatt ttttaaaaaa gcatgcttca tccggttctg 60  
271 ctgctag 67  
273 <210> SEQ ID NO: 18  
274 <211> LENGTH: 67  
275 <212> TYPE: DNA  
276 <213> ORGANISM: Artificial Sequence  
278 <220> FEATURE:  
279 <223> OTHER INFORMATION: Z1373 SWI16 18 myc backward primer  
281 <400> SEQUENCE: 18  
282 aataacttca aataaagtca taaaagttaa tgcaatgaaa tcacatgccc cctcgaggcc 60  
283 agaagac 67  
285 <210> SEQ ID NO: 19  
286 <211> LENGTH: 67  
287 <212> TYPE: DNA  
288 <213> ORGANISM: Artificial Sequence  
290 <220> FEATURE:  
291 <223> OTHER INFORMATION: Z1448 FKH1 9 myc forward primer  
293 <400> SEQUENCE: 19  
294 catccatgga cgtaacaaca aacgcaaacg tgaacaattc ctctctgagt tccggttctg 60  
295 ctgctag 67  
297 <210> SEQ ID NO: 20  
298 <211> LENGTH: 67  
299 <212> TYPE: DNA  
300 <213> ORGANISM: Artificial Sequence  
302 <220> FEATURE:  
303 <223> OTHER INFORMATION: Z1448 FKH1 9 myc backward primer  
305 <400> SEQUENCE: 20  
306 ctttgttctt tattgtttta taatacatat ggggttcgacg acgctgaatt cctcgaggcc 60  
307 agaagac 67  
309 <210> SEQ ID NO: 21  
310 <211> LENGTH: 67  
311 <212> TYPE: DNA  
312 <213> ORGANISM: Artificial Sequence  
314 <220> FEATURE:  
315 <223> OTHER INFORMATION: Z1370 FKH2 18 myc forward primer  
317 <400> SEQUENCE: 21  
318 aggaactaat actagatacg gatggtgcaa agatcagtat tatcaacaac tccggttctg 60  
319 ctgctag 67  
321 <210> SEQ ID NO: 22  
322 <211> LENGTH: 67  
323 <212> TYPE: DNA  
324 <213> ORGANISM: Artificial Sequence  
326 <220> FEATURE:  
327 <223> OTHER INFORMATION: Z1370 FKH2 18 myc backward primer  
329 <400> SEQUENCE: 22

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/032,281

DATE: 06/14/2002  
TIME: 10:22:44

Input Set : A:\0399.1212-005.txt  
Output Set: N:\CRF3\06142002\J032281.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 2,4,12  
Seq#:2; N Pos. 1,2,3,4  
Seq#:3; N Pos. 1,2,3,4,7,8,9,10,11,12,15,20  
Seq#:4; N Pos. 7,11  
Seq#:5; N Pos. 3  
Seq#:6; N Pos. 6,7,8,11,14,16  
Seq#:7; N Pos. 2,3,4,7,8  
Seq#:8; N Pos. 2,3,8,12  
Seq#:10; N Pos. 2,5,8,9,10,12,13,14  
Seq#:11; N Pos. 5,11  
Seq#:12; N Pos. 4  
Seq#:32; N Pos. 4,5,6,7,8,10,12,13,14

please check

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/032,281

DATE: 06/14/2002

TIME: 10:22:44

Input Set : A:\0399.1212-005.txt

Output Set: N:\CRF3\06142002\J032281.raw

L:45 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:49 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1  
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:60 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:64 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2  
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:75 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:79 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:90 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:94 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4  
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:105 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:109 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5  
L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:120 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:124 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:135 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:139 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7  
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:150 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:154 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:8  
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:176 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:180 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10  
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:191 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:195 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11  
L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:206 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:210 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:12  
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:446 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:450 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:32  
L:451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0